Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC

Physics Letters B 734 (2014) 406

Contents lists available at ScienceDirect

Physics Letters B

www.elsevier.com/locate/physletb

Corrigendum

Corrigendum to "Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC" [Phys. Lett. B 726 (1–3) (2013) 88]

ATLAS Collaboration

ARTICLE INFO

Article history:
Available online 14 May 2014

One component of the statistical uncertainty on the results for $\mu_{\mathrm{VBF}+VH}/\mu_{\mathrm{ggF}+ttH}$ and $\mu_{\mathrm{VBF}}/\mu_{\mathrm{ggF}+ttH}$ was erroneously assigned as a component of the systematic uncertainty. The value of the total uncertainty was not affected by this misassignment. The uncertainties in Eq. (5) of the paper should be as follows:

$$\mu_{\mathrm{VBF}}/\mu_{\mathrm{ggF}+ttH} = 1.4^{+0.6}_{-0.5}(\mathrm{stat})^{+0.5}_{-0.3}(\mathrm{sys})$$

In addition, the correctly rounded central value of the ratio $\mu_{\mathrm{VBF}+VH}/\mu_{\mathrm{ggF}+ttH}$ for the $H \to \gamma\gamma$ channel is 1.2. The corrected version of Fig. 8 of the paper is presented below.

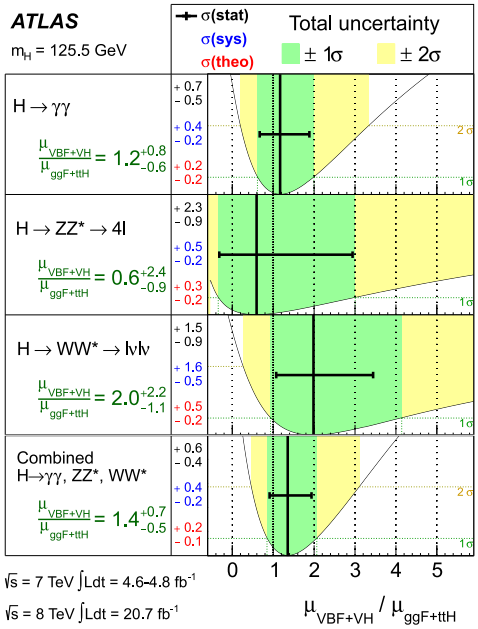

Fig. 8. Measurements of the $\mu_{\mathrm{VBF}+VH}/\mu_{\mathrm{ggF}+ttH}$ ratios for the individual diboson final states and their combination, for a Higgs boson mass $m_H = 125.5$ GeV. The best-fit values are represented by the solid vertical lines, with the total $\pm 1\sigma$ and $\pm 2\sigma$ uncertainties indicated by the dark- and light-shaded band, respectively, and the statistical uncertainties by the superimposed horizontal error bars. The numbers in the second column specify the contributions of the statistical uncertainty (top), the total (experimental and theoretical) systematic uncertainty (middle), and the theoretical uncertainty (bottom) on the signal cross section (from QCD scale, PDF, and branching ratios) alone. For a more complete illustration, the distributions of the likelihood ratios from which the total uncertainties are extracted are overlaid.

DOI of original article: http://dx.doi.org/10.1016/j.physletb.2013.08.010.

http://dx.doi.org/10.1016/j.physletb.2014.05.011